


Understanding Accountability in New Jersey


Clare Barrett



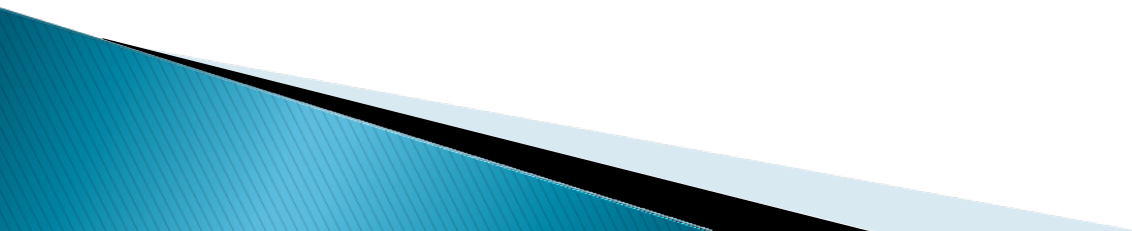
Federal Requirements

- ▶ The federal Law requires all states to establish standards for accountability for all schools and districts in their states.
 - ▶ The foundation for the accountability system is based on a state's academic content standards and aligned assessments.
 - ▶ The accountability system looks at the degree to which students across schools and districts are mastering the state standards.
 - ▶ Set the goal of 100% proficiency by the year 2014 with states setting incremental benchmarks.
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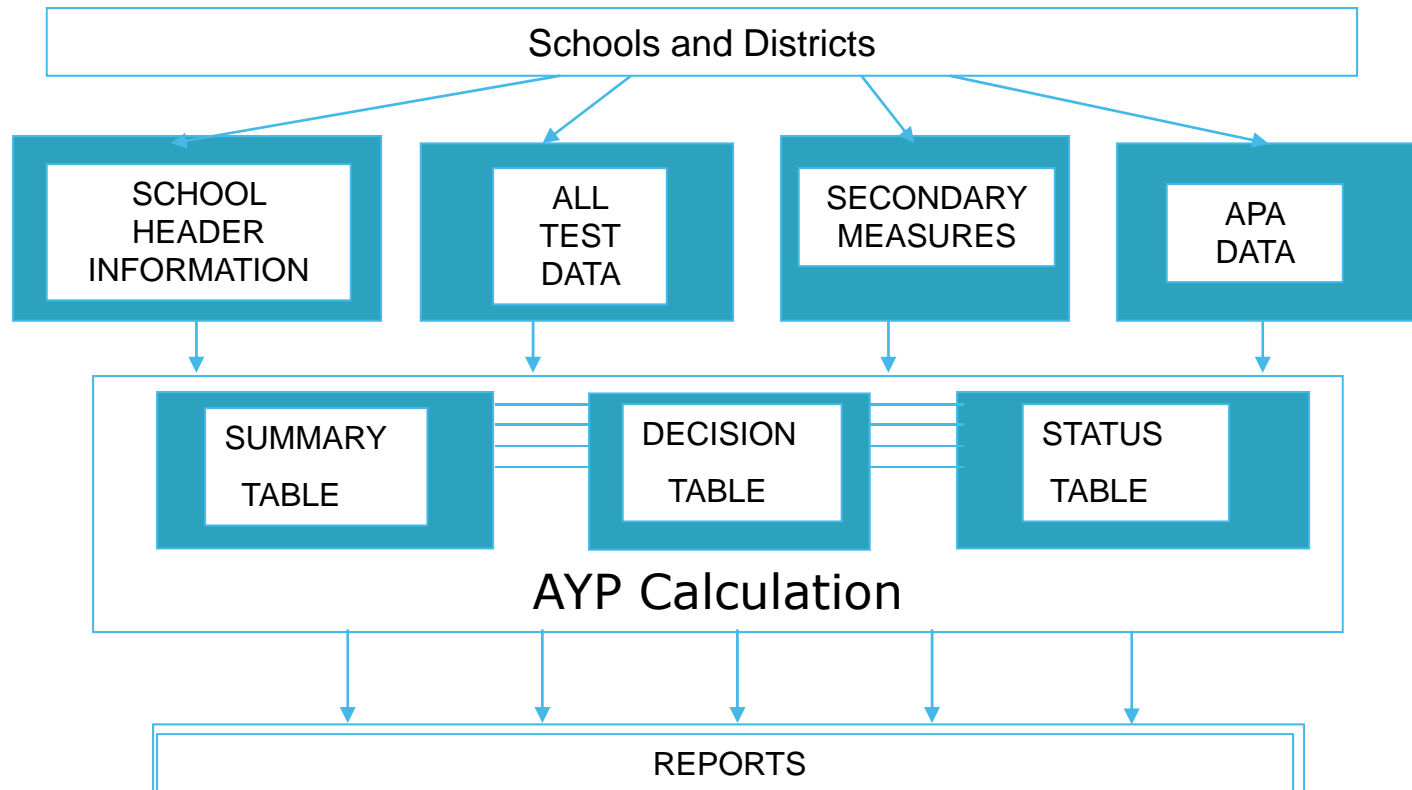
New Jersey Requirements

- ▶ To meet the federal requirements, New Jersey has adopted the New Jersey Single Accountability System.
 - ▶ State assessments in language arts literacy and mathematics are based on the New Jersey Core Curriculum Content Standards.
 - ▶ All students enrolled in New Jersey public schools, plus all student subgroups, must meet the proficiency benchmarks to ensure the goal of 100% proficiency.
 - ▶ Proficient or advanced proficient scores count toward meeting the benchmarks.
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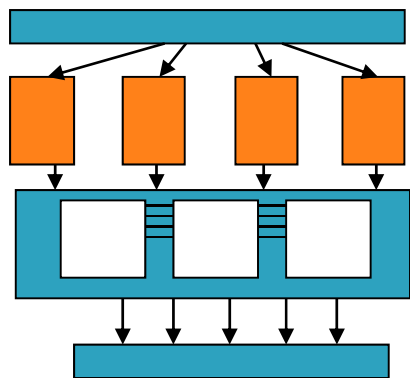
New Jersey Requirements

- ▶ Schools are evaluated using adequate yearly progress (AYP) indicators.
 - ▶ Student achievement is determined by grade span and each content area.
 - ▶ There are 40 indicators that must be met (including participation and proficiency rates) plus secondary indicators.
 - ▶ A safe harbor calculation is applied to measure significant progress if AYP is missed
 - ▶ When a school does not meet AYP, it may be designated as a school in need of improvement.
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Single Accountability Model

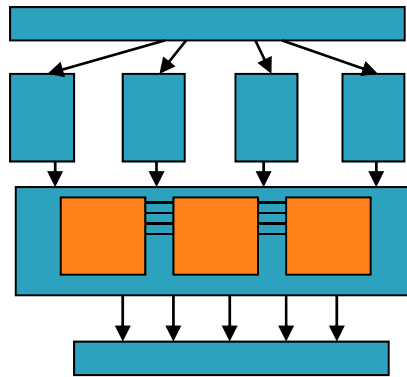


Detailed Analysis of Source Files



- ▶ Utilize NJDOE source files
 - Assessment data
 - graduation data
 - dropout data
 - attendance data
 - school header file
 - NJSMART
- ▶ Validate data
- ▶ Use business rule to check
- ▶ Reconcile discrepancies

Data Repository

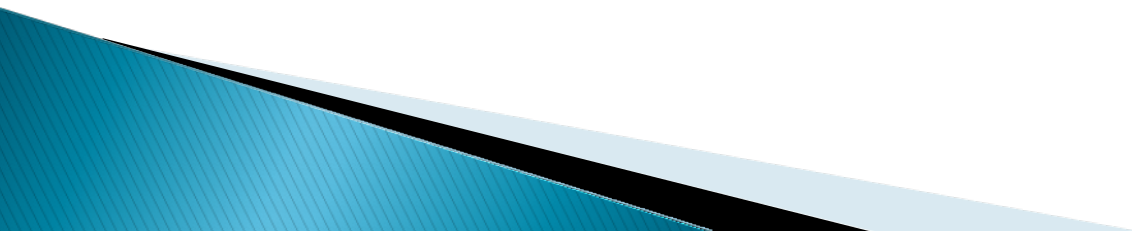


- ▶ AYP Calculation process provides data in related tables
 - Summary data
 - AYP Decision data
 - School Improvement Status
 - District Improvement Status
 - Adhoc requests

Calculating AYP: Process

- ▶ A process applied to each content area Language Arts Literacy and Math
- ▶ Participation and Performance for student subgroups
- ▶ Secondary measures Attendance and Dropout rate
- ▶ NJDOE Guidance to help through process
 - Understanding Accountability in New Jersey
 - AYP Calculator Worksheet
 - <http://www.nj.gov/education/title1/accountability/>

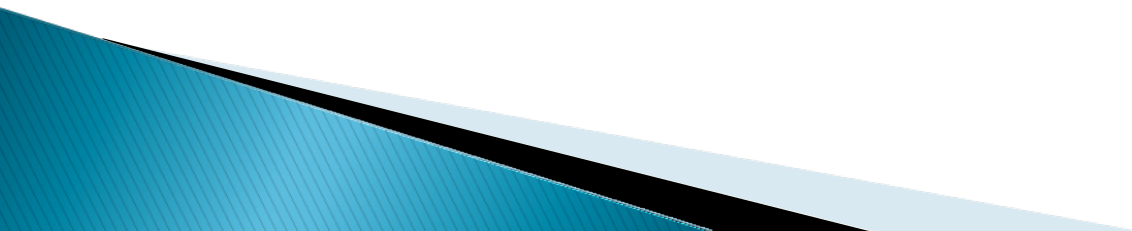
Student Subgroups

- ▶ Total
 - ▶ White
 - ▶ African–American
 - ▶ Hispanic
 - ▶ Asian/Pacific Islander
 - ▶ Native American/Indian
 - ▶ One or more Races (multiple category)
 - ▶ Economically disadvantaged
 - ▶ Students with disabilities
 - ▶ Limited English proficient
- 

Part I. 95% Participation

- ▶ Participation results are considered for student subgroups of 40 or more. (n-size)
- ▶ AYP is calculated for grade spans.
 - Elementary (grades 3–5)
 - Middle (grades 6–8)
 - High School (grade 11)
- ▶ Student populations for each grade span are aggregated for AYP calculations provided that the grades are housed in the same school. (CDS code)

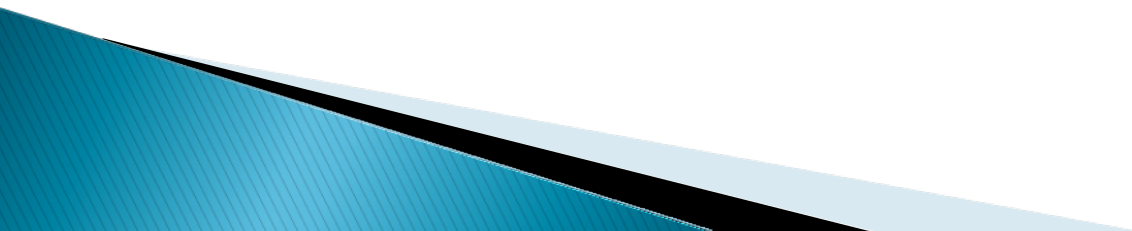
Factors Influencing Participation

- ▶ N-size :Participation results are considered for student subgroups of 40 or more
 - ▶ No confidence interval for participation rate
 - ▶ Not present (NP) – no answers on test booklet – by subject area
 - ▶ Voids: Any student who does not receive a valid score is considered not participating
 - ▶ NJSMART and SIDS can affect the participation rate
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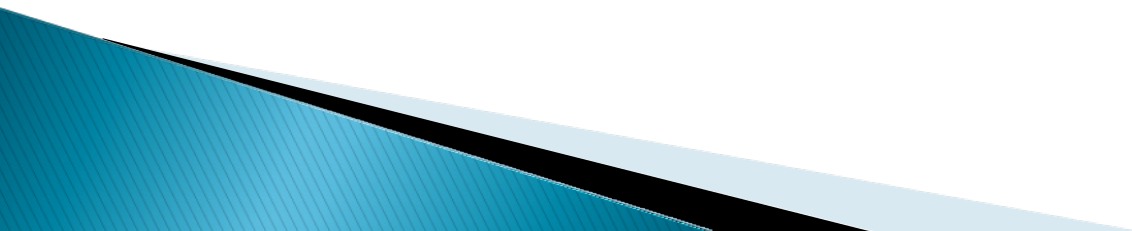
IEP students

- ▶ IEP exempt from Passing
 - Used for Graduation requirement
 - NCLB requires that all students be tested
- ▶ IEP exempt from Taking :
 - Coding on the state test for a student who is taking the APA

Home School

- ▶ For accountability purposes, Special education and LEP students are to be counted in their home school.
 - ▶ Applies to those students in out-of-district placement or an in-district program in other than their home school.
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Home School Coding Issues

- ▶ How to track out of district placement?
 - ▶ Consistent coding NJSMART vs Assessment
 - ▶ All students must be tested?
 - ▶ Do you know who your kids are?
 - ▶ APA coding sending/receiving coding
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Home School Decision

- ▶ Are special education and LEP students who attend other than their neighborhood school (i.e., out-of-district placement or in-district program) counted in their home school?

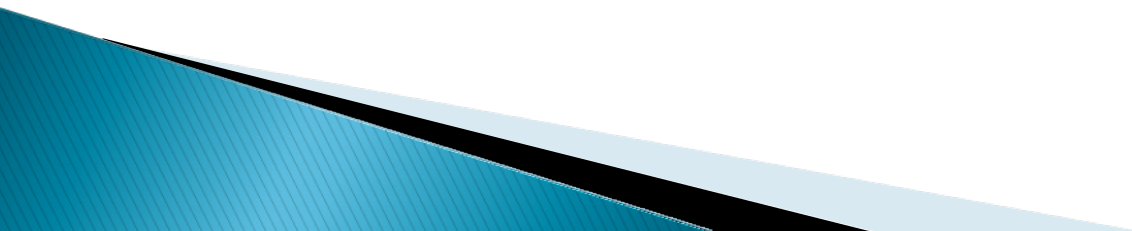
Student Mobility

- ▶ A student is considered in school less than a year ($TIS < 1$) if the student has changed his/her residence and changed their school, that is, moved into the district or moved within the district, by July 1st.
- ▶ $TIS < 1$ applies if the residence of the student did not change, but the assigned school changed due to a charter school, private school, private transfer or inter-district school choice option.

Student Mobility

- ▶ TIS < 1 does not apply if the residence of the student did not change, but the assigned school changed, either due to new school construction, district reconfiguration, or natural progression of grade span or intra-district school choice option.

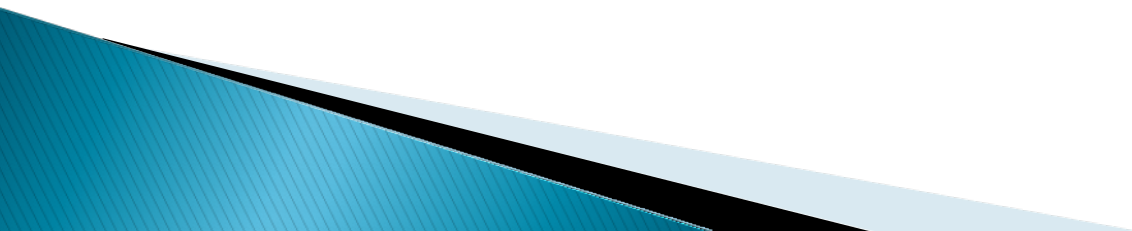
TIS<YR included in Participation Rate

- ▶ All Students are included in the enrollment count and is used in the participation rate calculation.
 - ▶ TIS<YR students are not filtered out for the participation rate.
 - ▶ TIS<YR students are filtered out for the proficiency rate.
 - ▶ TIS<YR coding is collected from the test data.
 - ▶ Accurate coding on test administration student booklets is the responsibility of the district.
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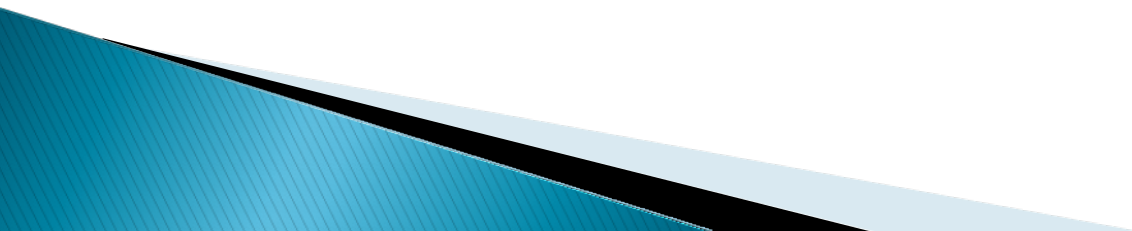
95% Participation Formula

$$\text{Participation} = \frac{\begin{array}{l} \text{Number of all students} \\ \text{enrolled who took a state} \\ \text{assessment or alternative} \\ \text{assessment and have a valid} \\ \text{score or APA level}} \end{array}}{\begin{array}{l} \text{Number of all students} \\ \text{enrolled} \end{array}}$$

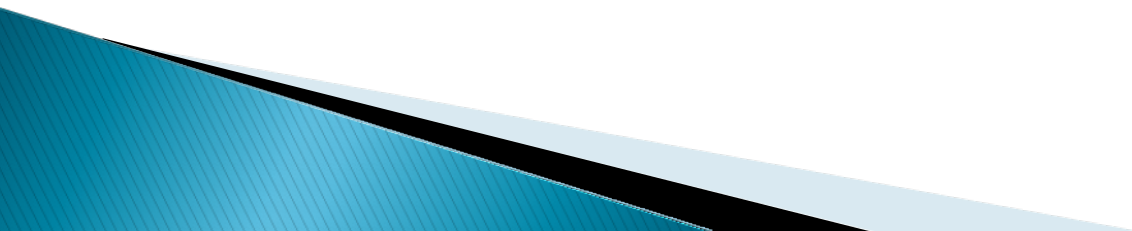
95% Participation Decision

- ▶ Did 95% of all students within each student subgroup participate in the assessments?
 - ▶ If 95% participation was not achieved (answer no to either question), then AYP was not made.
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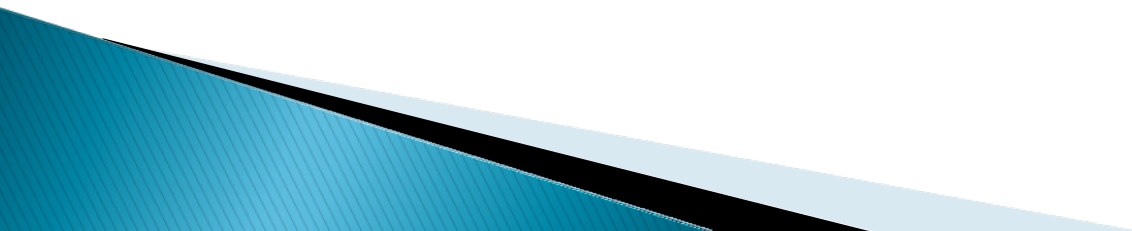
Participation Averaging

- ▶ Schools that missed AYP for participation alone are considered for participation averaging.
 - ▶ Aggregate three years of data. Don't average the averages.
 - ▶ Did 95% of all students on average over three years participate in assessments?
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Part II. Proficiency – AYP

- ▶ Step 1: Statistically Significant N-size, excluding students less than a year
 - ▶ Step 2: Additional Flexibility
 - Full flexibility for LEP students
 - High School Banking
 - ▶ Step 3: AYP with a 95% Confidence Interval
 - ▶ Step 4: Safe Harbor with a 75% confidence interval
 - ▶ Step 5: Secondary measures applied
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Step1 : Statistically Significant

- ▶ Excluding students that are less than a year in school,
 - ▶ For subgroups that include less than 30 students for performance using the aggregated results for each grade span; the subgroup is calculated, but are not statistically significant, and are not considered for AYP accountability.
 - ▶ Grades 3–5 and 6–8 (within the same school) are aggregated, the subgroup minimum of 30 is applied to the aggregated grade span data.
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Step 2a: Full Flexibility for LEP Students

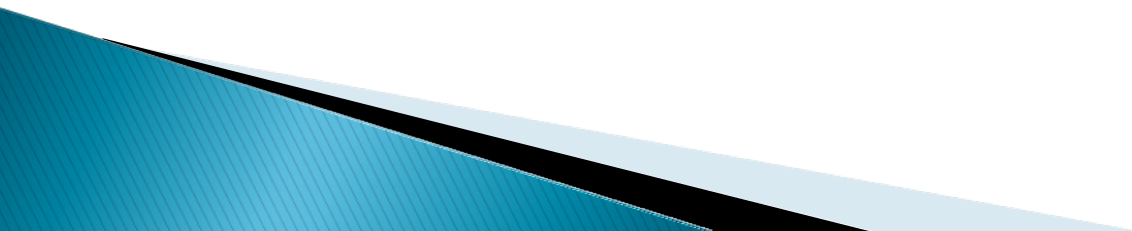
- ▶ LEP student scores for students who have exited English language instructional programs for up to two years may be included in the AYP calculations.

Proficiency Formula

Proficiency =
$$\frac{\text{Number of students who took a state assessment test who performed at proficient or advance proficient levels plus the number of students who participated in an alternate assessment who demonstrated performance equivalent to proficient or advanced proficient levels}}{\text{All students, who performed or who demonstrated performance.}}$$

All students, who performed or who demonstrated performance.

Step 2b: High School Banking

- ▶ Only three administrations of the Grade 11 state assessment are utilized for AYP (SPR, OCT, SPR)
 - ▶ After the initial administration, the eligible population will be determined. The initial administration defines the cohort. Cohort remains the same through all three administrations.
 - ▶ All scores from the three administration are used in the AYP calculations.
 - ▶ Confidence Intervals are applied
 - ▶ More administrations are allowed for the graduation requirement.
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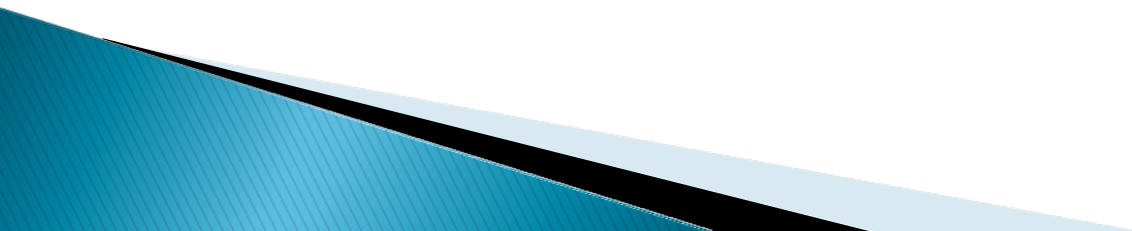
Banking Proficiency Formula

Proficiency =
$$\frac{\text{Number of students in cohort who took a state assessment test scoring proficient or advance proficient levels over three administrations plus the number of students who participated in an alternate assessment who demonstrated performance equivalent to proficient or advanced proficient levels}}{\text{All students in cohort with valid scores}}$$

All students in cohort with valid scores



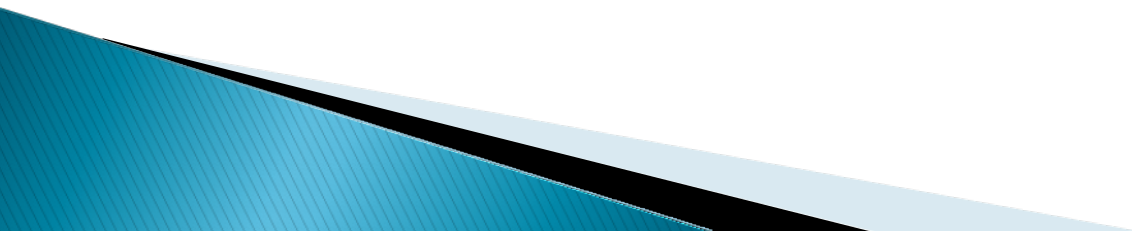
Step 3: 95% Confidence Interval

- ▶ A confidence interval (CI) is a statistical method to minimize the risk of misclassifying schools.
 - ▶ A confidence interval at 95% probability is applied to the actual proficiency results for the total population as well as each student subgroup for each content area.
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95% Confidence Interval

- ▶ To calculate a confidence interval using actual test results for the total and each subgroup, perform the following computations:
 - Calculate the percent proficient (p).
 - Calculate CI. The factor for 95% confidence (Z 95) is 1.96.
 - The formula is $1.96 \times \sqrt{\frac{p(1-p)}{N}}$
 - Find the Upper Limit of Confidence = p plus CI.

95% Confidence Interval Decision

- ▶ Compare the Upper Limit of Confidence to the Yearly Target.
 - ▶ If the Upper Limit of Confidence equals or exceeds the Yearly Target, AYP is met.
 - ▶ If the Upper Limit of Confidence is less than the Yearly Target, AYP is not met.
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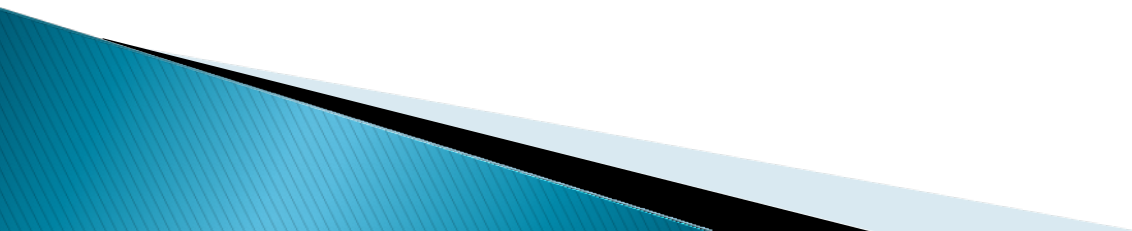
Review of Test Results

- ▶ Actual student targets for the total enrollment and all student subgroups must be met.
 - ▶ Pass rate calculations use aggregated valid test results with CI applied, excluding those individuals who are less than a year in school, and compared to the AYP benchmarks.
 - ▶ IEP exempt applies to graduation requirements only; it does not apply to AYP calculation.
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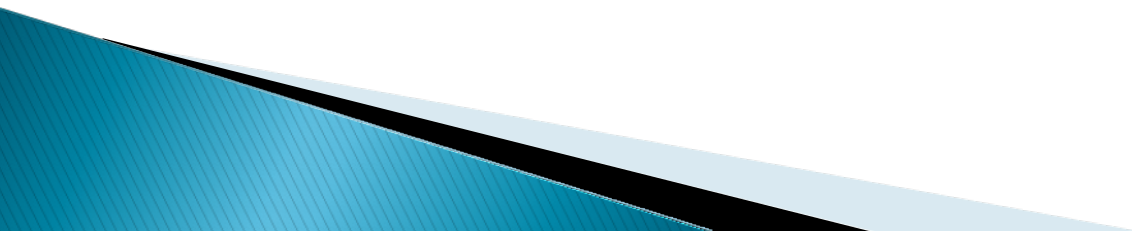
State Benchmarks for AYP

| | | Starting Point 2003 | 2005 | 2008 | 2011 | 2014 |
|-----------------------------------|------------------------------|--------------------------------|-------------|-------------|-------------|-------------|
| Language Arts Literacy | Elementary Grades 3, 4, 5 | 68 | 75 | 59 | 79 | 100 |
| | Middle Grades 6, 7, 8 | 58 | 66 | 72 | 86 | 100 |
| | High School Grade 11 | 73 | 79 | 85 | 92 | 100 |
| Mathematics | Elementary Grades 3, 4, 5 | 53 | 62 | 66 | 83 | 100 |
| | Middle Grades 6, 7, 8 | 39 | 49 | 61 | 80 | 100 |
| | High School Grade 11 | 55 | 64 | 74 | 86 | 100 |

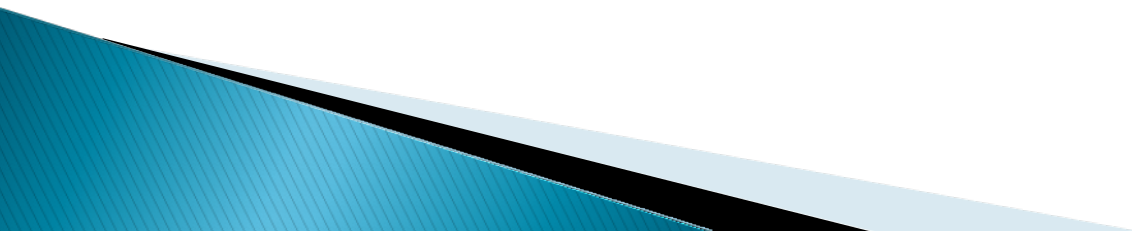
Step 4: Safe Harbor

- ▶ For the total population and for each student subgroup that does not attain the state benchmark, then a safe harbor determination is made.
 - ▶ The total population and *a//* subgroups must attain either the benchmark or safe harbor for the school to make AYP.
 - ▶ Safe harbor is determined using aggregated data for grade spans with a 75% CI.
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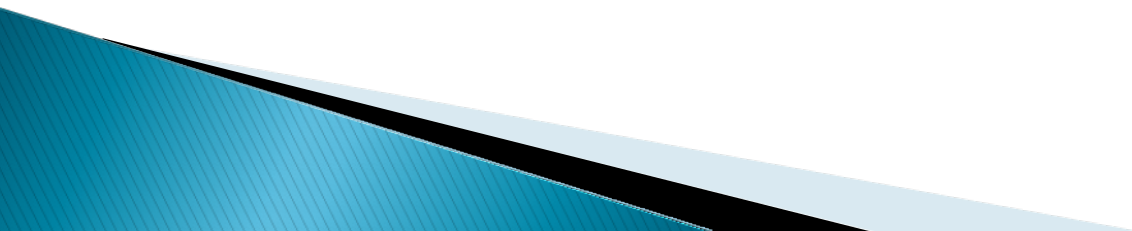
Safe Harbor Decision

- ▶ Does each subgroup not attaining the benchmark meet proficiency using safe harbor criteria; that is, reducing last years partially proficient rate by at least 10%?
 - ▶ Does the total population meet proficiency using these standards?
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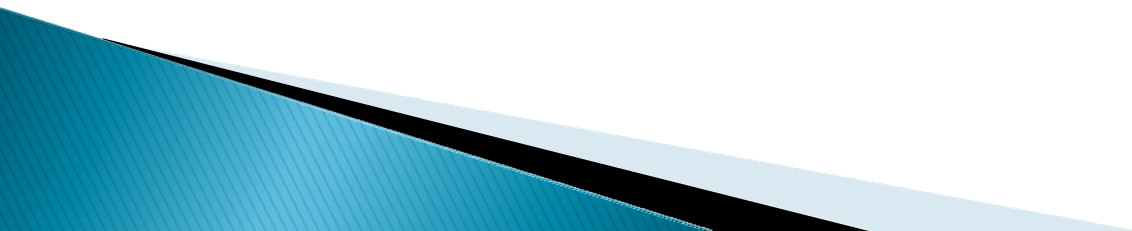
Safe Harbor Decision

- ▶ If the answer is yes for the *total* population and for *all* subgroups for which the safe harbor proficiency standard was calculated, the secondary measures must now be applied for final AYP calculations.
 - ▶ If the answer is no for the total population or *any* subgroup not meeting the benchmark or the safe harbor proficiency standard, then the school did not make AYP.
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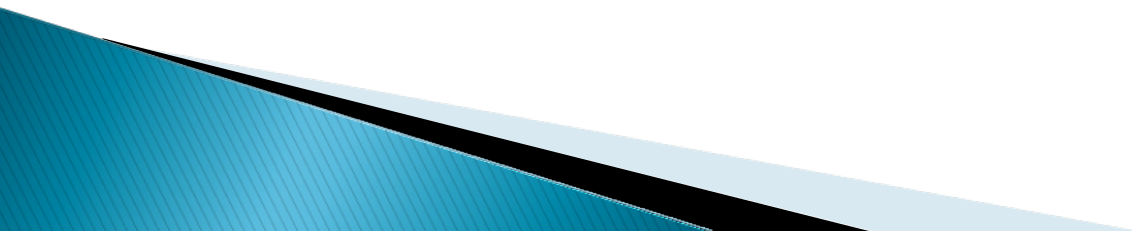
Step 5: Secondary Measures

- ▶ Secondary measures built into the final calculation of AYP.
 - ▶ Due to data availability, they are not applied to the preliminary calculations.
 - ▶ Standards for these measures must be met by the total school population in order to make AYP.
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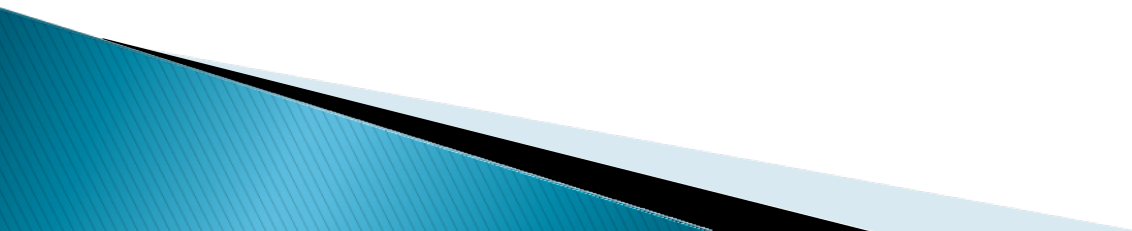
Secondary Measures

- ▶ Graduation rate/dropout data for high schools.
 - Until graduation rate data is available dropout rate data is applied.
 - ▶ Attendance rate data are applied at the elementary and middle school level only.
 - The ASSA report provides the Average Daily Attendance (ADA) data used for the attendance calculation.
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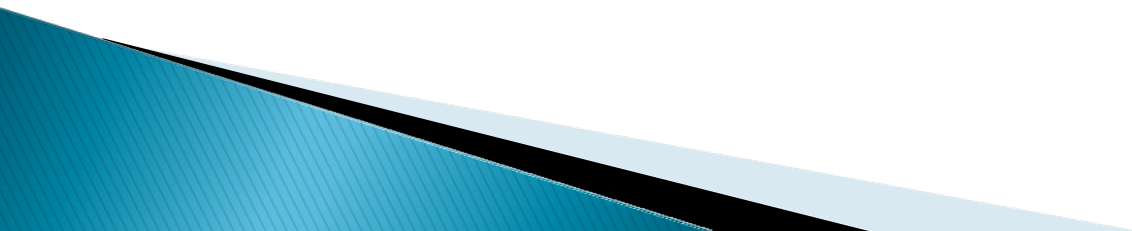
Secondary Measures Decision

- ▶ For High Schools: Was the high schools dropout rate less than 2.6% or was it .5% less than the previous year?
 - ▶ For Elementary and Middle Schools: Did the Average Daily Attendance for the school year reported on the ASSA meet or exceed 90%?
 - ▶ If the answer to either question is no, the school did not make AYP.
- 

Secondary Measures for Safe Harbor Decision

- ▶ Has the total population and each student subgroup that did not meet the benchmarks meet the proficiency standards for safe harbor (and the secondary measure indicators if calculating final AYP)?
 - ▶ If the answer is yes then the school has made AYP for this content area.
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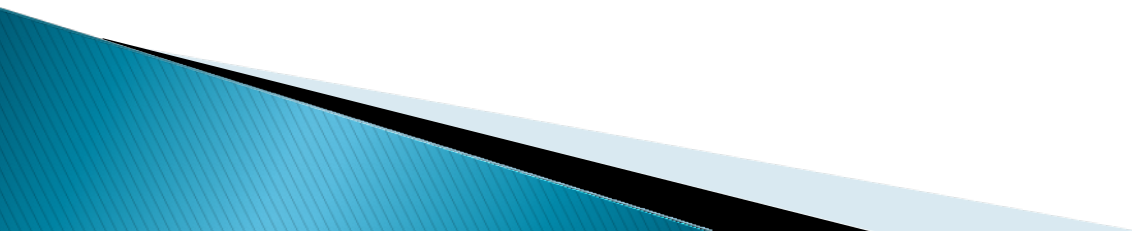
Meeting AYP

- ▶ School does not meet AYP: If a school missed AYP for any indicator in any grade span by content area
 - ▶ District does not meet AYP: If the district missed AYP for any indicator in all grade spans by content area.
- 

In Need of Improvement

- ▶ School in Need of Improvement – (SINI)
 - Miss school AYP for two consecutive years in same content area
- ▶ District in Need of Improvement – (DINI)
 - Miss district AYP for two consecutive years in same content area.

Calculation Process Example

- ▶ Example SCHOOL A:
 - Elementary grade span (grades 3–5)
 - Language Arts Literacy
 - Economically Disadvantaged subgroup
- 

Step 1: Participation Rate

- ▶ From Student Roster (DATA) including APA
- ▶ Aggregate each grade in grade span:
 - Enrollment – by sub-group
 - Not participating –
 - Identify all not participating students (NP) in each grade within the grade span (3–5)
 - Voids: Any student who does not receive a valid score is considered not participating
- ▶ Calculate Participation rate:
 - Aggregate enrollment across grade span
 - Enter numbers in calculator
- ▶ Repeat for each subgroup, grade span, and content area

Assessment Student Roster

TEST DATE: Spring 2008
REPORT PRINTED: 8/15/2008
CYCLE I

New Jersey Assessment of Skills and Knowledge All Sections Roster Grade 5



COUNTY:
DISTRICT:
SCHOOL:

STUDENTS PROCESSED:

| STUDENT NAME ASK ID NUMBER / SSID | DOB | SEX | ETHNIC CODES | LEP | SE | TITLE I | ED | MI | OUT OF DIST | OUT OF RES | TID <1 | TIS <1 | APA | MATHEMATICS | | LANGUAGE ARTS LITERACY | |
|--------------------------------------|----------|-----|-----------------|-----|----|---------|----|----|-------------------|------------------|-----------|-----------|-----|----------------|-------------------------|---------------------------|-------------------------|
| | | | | | | | | | | | | | | SCALE SCORE | PROFICIENCY LEVEL | SCALE SCORE | PROFICIENCY LEVEL |
| | 04/23/97 | F | W | | | | | | | | | | | 284 | ADVANCED PROFICIENT | 218 | PROFICIENT |
| | 09/18/97 | M | W | | B | | | | | | | | | 300 | ADVANCED PROFICIENT | 207 | Not Present |
| | 05/03/97 | F | H | | | | | | | | | | | 184 | PARTIALLY PROFICIENT | 202 | PROFICIENT |
| | 05/21/97 | F | W | | | | | | | | Y | Y | | 222 | PROFICIENT | 202 | PROFICIENT |
| | 02/13/97 | F | W | | | | | | | | | | | 277 | ADVANCED PROFICIENT | 231 | PROFICIENT |
| | 06/20/97 | M | W | | | | | | | | | | | 209 | PROFICIENT | 182 | PARTIALLY PROFICIENT |
| | 01/16/94 | M | B | | | | | | | | | | | 228 | PROFICIENT | 225 | PROFICIENT |
| | 10/27/96 | F | B | | | | Y | | | | | | | 156 | PARTIALLY PROFICIENT | 158 | PARTIALLY PROFICIENT |
| | 09/12/96 | M | W | | | | | | | | | | | 184 | PARTIALLY PROFICIENT | 190 | PARTIALLY PROFICIENT |
| | 07/09/97 | M | B | | | | | | | | | | | 219 | PROFICIENT | 203 | PROFICIENT |

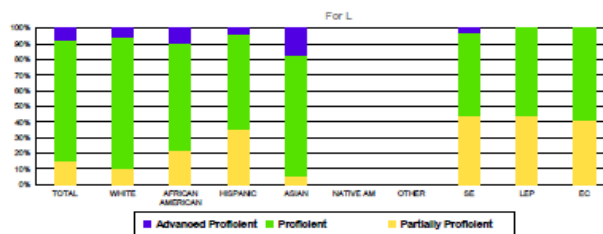
Step 2: AYP Performance

- ▶ From Student Roster (DATA) including APA
- ▶ Aggregate each grade in grade span
 - Identify Advanced Proficient (AP)– by sub–group
 - Identify Proficient– (P) by sub–group
 - Partially Proficient–(PP) by sub–group
- ▶ Calculate Proficiency rate=
 - Aggregate AP, P, and PP across grade span
 - Enter numbers in calculator
 - Or use Formula $(AP + P)/(AP + P + PP)$
- ▶ Repeat for each subgroup, grade span, and content area

Student Performance Elementary –LAL

New Jersey Department of Education Adequate Yearly Progress (AYP) Data Charts For Year - 0708

| | | | |
|---------------|------------|---------------|----------|
| COUNTY CODE | | COUNTY NAME | |
| DISTRICT CODE | | DISTRICT NAME | |
| SCHOOL CODE | | SCHOOL NAME | |
| GRADE SPAN | ELEMENTARY | SUBJECT | LANGUAGE |



| | | | | | | | | | | |
|-----------------------------|-------|-------|------------------|----------|-------|-----------|--------|-------|-----|-------|
| AYP Target 73% | TOTAL | WHITE | AFRICAN AMERICAN | HISPANIC | ASIAN | NATIVE AM | OTHERS | SE | LEP | EC |
| Total Valid Score | 329 | 187 | 32 | 53 | 57 | | | 36 | | 48 |
| % Partially Proficient (PP) | 14.9 | 10.7 | 21.9 | 35.8 | 5.3 | | | 44.4 | | 41.7 |
| % Proficient (P) | 77.2 | 83.4 | 68.8 | 60.4 | 77.2 | | | 52.8 | | 58.3 |
| % Advanced Proficient (AP) | 7.9 | 5.9 | 9.4 | 3.8 | 17.5 | | | 2.8 | | 0.0 |
| Total Proficiency | 85.1 | 89.3 | 78.2 | 64.2 | 84.7 | | | 55.6 | | 58.3 |
| Upper Limit CI | 88.9 | 93.7 | 92.5 | 77.1 | 100.0 | | | 71.8 | | 72.3 |
| Total Enrollment | 329 | 187 | 32 | 53 | 57 | | | 36 | | 48 |
| % Participation | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | | | 100.0 | | 100.0 |

New Jersey Department of Education
Adequate Yearly Progress (AYP) Status Under NCLB Accountability Requirements : 07-08

| |
|----------------|
| SCHOOL NAME: |
| SCHOOL CODE: |
| DISTRICT NAME |
| DISTRICT CODE: |
| COUNTY NAME: |
| COUNTY CODE : |

| | |
|--------------------------|----------|
| SCHOOL MADE AYP | NO |
| NUMBER OF INDICATORS MET | 40 of 41 |

2008 STATE ASSESSMENT GRADE SPAN : ELEMENTARY

| GROUPS | Made 95% Participation Rate | | Made AYP Benchmark Target | | Made Safe Harbor | |
|--|---|------|--|------|------------------|------|
| | A (-) denotes fewer than 40 students in a group | | A (-) denotes fewer than 30 students in a group | | | |
| | LAL | MATH | LAL | MATH | LAL | MATH |
| Total Population | YES | YES | YES | YES | | |
| Students with Disabilities | - | - | NO | YES | YES | |
| Limited English Proficient Students | - | - | - | - | | |
| White | YES | YES | YES | YES | | |
| African-American | - | - | YES | YES | | |
| Asian / Pacific Islander | YES | YES | YES | YES | | |
| American Indian / Native American | - | - | - | - | | |
| Hispanic | YES | YES | YES | YES | | |
| Others | - | - | - | - | | |
| Economically Disadvantaged | YES | YES | NO | YES | NO | |
| School Attendance Rate : Met Target (For elementary and middle schools) | YES | | Drop-Out Rate : Met Target (For high schools) | | | |

**New Jersey Department of Education
School Improvement Status Summary: School Year 2008-2009**

FOR SCHOOL YEAR: 08-09
YEARLY STATUS: YEAR 1

COUNTY CODE: COUNTY NAME:
DISTRICT CODE: DISTRICT NAME:
SCHOOL CODE: SCHOOL NAME:

SCHOOL AYP SUMMARY

| GRADE SPAN | SUBJECT | PREVIOUS STATUS | HOLD | CURRENT AYP | YR | HOLD |
|------------|---------|-----------------|------|-------------|----|------|
| ELEMENTARY | L | N/A | | NO | 1 | |
| ELEMENTARY | M | N/A | | YES | 0 | |

SCHOOL IMPROVEMENT STATUS SUMMARY

| SCHOOL YEAR | IMPROVEMENT STATUS | HOLD STATUS |
|-------------|--------------------|-------------|
| 03-04 | N/A | |
| 04-05 | N/A | |
| 05-06 | N/A | |
| 06-07 | N/A | |
| 07-08 | N/A | |
| 08-09 | YEAR 1 | |

School AYP Summary

GRADE SPAN Lists the grade spans in which state assessments were administered in the school
ELEMENTARY Grade 3, 4, and 5
MIDDLE Grade 6, 7, and 8
SECONDARY Grade 11
SUBJECT: Identifies Language Arts Literacy and Mathematics
PREVIOUS STATUS: Indicates the improvement status by subject for the prior school year (N/A-Not in Status)
HOLD: If the school made AYP for one year, the improvement status did not progress (H-hold)
CURRENT AYP: Indicates if AYP was made in the current school year ("YES" or "NO"), or indicates "TOO FEW" students to analyze.

School Improvement Status Summary

SCHOOL YEAR: Identifies the school year
IMPROVEMENT STATUS: Specifies the AYP improvement status for that school year (N/A-Not in Status)
HOLD STATUS: If the school made AYP, the improvement status does not progress for that year (H-hold)

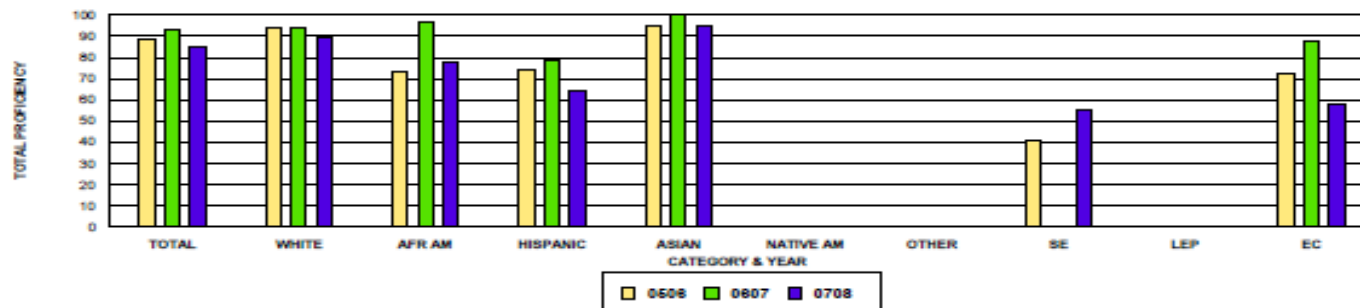
School Improvement Information Sheet - <http://www.nj.gov/education/title1/accountability/ayp/0809/>

Three Year Student Performance

New Jersey Department of Education Adequate Yearly Progress (AYP) 3 Year Trend Charts

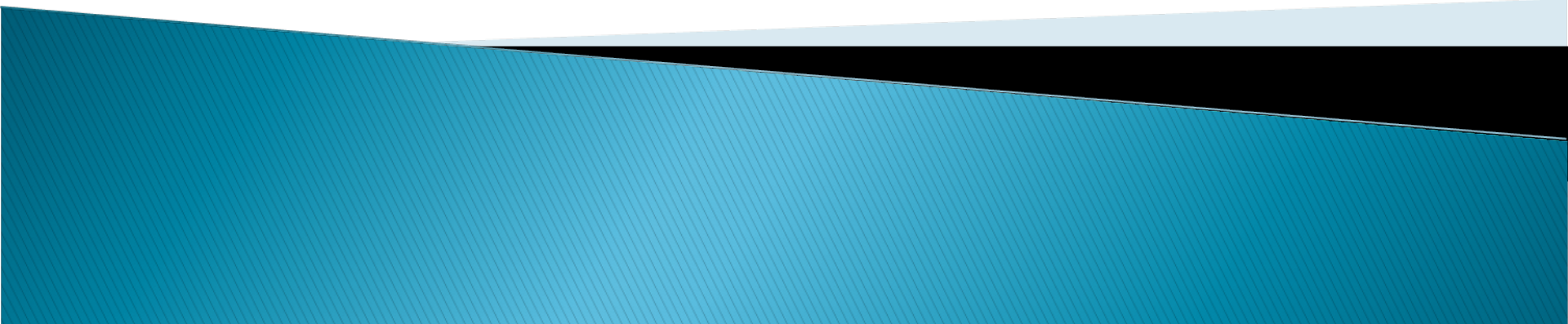
| | | | |
|---------------|------------|---------------|----------|
| COUNTY CODE | | COUNTY NAME | |
| DISTRICT CODE | | DISTRICT NAME | |
| SCHOOL CODE | | SCHOOL NAME | |
| GRADE SPAN | ELEMENTARY | SUBJECT | LANGUAGE |

TOTAL PROFICIENCY / CATEGORY & YEAR
For L



| YEAR | AYP Target | Total Valid Score | Total Prof | White Valid Score | White Prof | Afr Am Valid Score | Afr Am Prof | Hispanic Valid Scores | Hispanic Prof | Asian Valid Score | Asian Prof | NativeAm Valid Scores | Native Am Prof | Other Valid Score | Other Prof | SE Valid Score | SE Prof | LEP Valid Score | LEP Prof | EC Valid Score | EC Prof |
|------|------------|-------------------|------------|-------------------|------------|--------------------|-------------|-----------------------|---------------|-------------------|------------|-----------------------|----------------|-------------------|------------|----------------|---------|-----------------|----------|----------------|---------|
| 0508 | 78% | 288 | 88.2 | 161 | 94.4 | 30 | 73.4 | 59 | 74.6 | 38 | 94.7 | 0 | 0.0 | 0 | 0.0 | 37 | 40.5 | | | 51 | 72.6 |
| 0607 | 78% | 285 | 93.0 | 171 | 93.8 | 33 | 97.0 | 37 | 78.4 | 44 | 100.0 | 0 | 0.0 | 0 | 0.0 | 25 | 72.0 | | | 47 | 87.3 |
| 0708 | 73% | 329 | 85.1 | 187 | 89.3 | 32 | 78.2 | 53 | 64.2 | 57 | 94.7 | 0 | 0.0 | 0 | 0.0 | 36 | 55.6 | 1 | | 48 | 58.3 |

Data Quality

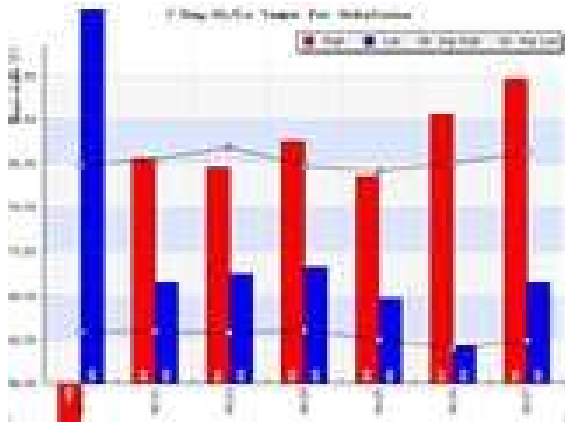


Data Management Process – Data Mapping



- ▶ Data often resides in multiple legacy systems, various formats and an assortment of different databases
- ▶ Design a model that describes all the source data
 - What?
 - Where ?
 - How ?

Data Management Process – Data Quality



- ▶ Use plots and descriptive statistics, to identify issues with data
- ▶ Use business rules to check formats, critical elements and data validation procedures

Data Management Process – Data Governance



- ▶ Make sure someone is in charge of the way data is handled and prioritized
- ▶ Designated data steward who is responsible for the reliability, availability and utilization of data



Reference and Materials

- ▶ Title1@doe.state.nj.us
- ▶ <http://www.nj.gov/njded/title1/accountability/>
- ▶ <http://education.state.nj.us/rc/nclb10/index.html>
- ▶ Assessment Rosters
- ▶ Data Charts
- ▶ AYP Profile and Yearly Status Reports
- ▶ Trend Charts